



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/808,814

03/24/2004

Yanhui Sun

RD8510USNA

7602

43693

7590

07/07/2006

INVISTA NORTH AMERICA S.A.R.L.
THREE LITTLE FALLS CENTRE/1052
2801 CENTERVILLE ROAD
WILMINGTON, DE 19808

EXAMINER

KHAN, AMINA S

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,814

Applicant(s)

SUN, YANHUI

Examiner

Amina Khan

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/21/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to applicant's arguments filed on April 21, 2006.
2. Claims 1-33 are pending. Claims 34-38 are cancelled. Claims 7,9,11 and 26 are amended.
3. Applicant's amendments to claim 7 are sufficient to overcome the 35 USC 112 rejection of claims 7-11. The rejection of the claims is withdrawn.
4. Claims 22,24,25 and 26 stand rejected under 35 USC 112 for the reasons set forth in the previous office action. The rejection of the claims is maintained.
5. Applicant's cancellation of claims 34-38 is sufficient to moot the 35 USC 112 rejection of claims 34-38. The rejection of the claims is withdrawn.
6. Claims 1,7,12-16,22 and 27-38 stand rejected under 35 U.S.C. 102(b) as being anticipated by Pechold (US 5,356,689) for the reasons set forth in the previous office action. The rejection of the claims is maintained.

7. Claims 8 and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pechold (US 5,356,689) in view of Elgarhy (US 6,207,594) for the reasons set forth in the previous office action. The rejection of the claims is maintained.

8. Claims 2-4,6,9-11,17-20 and 24-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pechold (US 5,707,708) in view of Flat et al. (US 5,993,965) for the reasons set forth in the previous office action. The rejection of the claims is maintained.

9. Claims 5 and 21 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims for the reasons set forth in the previous office action. The objection to the claims is maintained.

Response to Arguments

10. Applicant's arguments filed April 21, 2006 have been fully considered but they are not persuasive.

11. With respect to the applicant's arguments to the rejection of claims 1,7,12-16,22 and 27-38 under 35 U.S.C. 102(b) as being anticipated by Pechold (US 5,356,689), the applicant asserts:

"There is no suggestion of having two or more hydroxyl groups in the chemical structure of the crosslinking agents, and for that reason the composition of the claimed invention is distinguishable from the compositions disclosed by Pechold '689. Similarly, Pechold '689 does not teach a process for imparting to a polyamide substrate resistance to staining using a composition containing at least two hydroxyl groups"

The examiner respectfully disagrees. Pechold clearly teaches crosslinking agents with at least two hydroxyl groups (column 4, lines 40-45) as instantly claimed. Furthermore, Pechold clearly teaches applying compositions comprising stain resists to polyamide fibers (column 3, lines 14-20). Therefore, the rejection of the claims is maintained.

12. With respect to the applicant's arguments to the rejection of claims 8 and 23 under 35 U.S.C. 103(a) as being unpatentable over Pechold (US 5,356,689) in view of Elgarhy (US 6,207,594), the applicant asserts:

"the methacrylic acid polymer disclosed by Elgarhy actually has a number average molecular weight of 50,000 to 250,000 which is much less than 300,000 which is required for the claimed invention. In fact, referring to Col 3, line 36, of the reference Elgarhy expresses a preference for a number average molecular weight of from 60,000 to 75,000, which is significantly below the applicant's lower limit."

The examiner respectfully disagrees. Elgarhy clearly teaches methacrylic acid polymers with average molecular weights typically 100,000 to 500,000 (column 3, lines

30-40). All disclosures of the prior art, including non-preferred embodiment, must be considered. See *In re Lamberti and Konort*, 192 USPQ 278 (CCPA 1967); *In re Snow* 176 USPQ 328 (CCPA 9173). Nonpreferred embodiments can be indicative of obviousness, see *Merck & Co. v. Biocraft Laboratories Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1989); *In re Lamberti*, 192 USPQ 278 (CCPA 1976); *In re Kohler*, 177 USPQ 399. Therefore, the rejection of the claims is maintained.

13. With respect to the applicant's arguments to the rejection of claims 2-4,6,9-11,17-20 and 24-26 under 35 U.S.C. 103(a) as being unpatentable over Pechold (US 5,707,708) in view of Flat et al. (US 5,993,965) the applicant asserts:

"The composition of Flat et al. is a "hydrophobic material" (Col. 2, line 12), and its function in forming a protective coating on fibers via photopolymerization is different from the result obtained according to the instant invention."

"Flat et al. is directed to the protection of fibers, particularly glass fibers"

The examiner asserts that Flat et al. is clearly directed toward the treatment of textile fibers such as polyamide fibers (column 2, lines 5-10). Furthermore, nothing in the instant claims prohibits the inclusion of photopolymerization. While the instant claims recite in the preamble "process for imparting resistance to staining by coffee and/or acid dyes", the preamble was given little patentable weight. Flat et al. clearly teaches treating polyamide fibers with epoxidized polybutadienediol having an OH at each end of the chain which may in addition have vinyl comonomers for the purpose of providing protection to the fibers (column 2, lines 6-44), therefore Flat et al. meets the

method steps and obviously would provide stain resistance to the polyamide fibers. The rejection of the claims is maintained.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Amina Khan
Patent Examiner
June 30, 2006



LORNA M. DOUYON
PRIMARY EXAMINER